

THE BRAIN: UNDERSTANDING NEUROBIOLOGY THROUGH THE STUDY OF ADDICTION		
Mississippi Competencies for Biology		
Lesson	Competency	Description
3	1.a	Demonstrate the proper use and care for scientific equipment used in biology.
3	1.b	Observe and practice safe procedures in the classroom and laboratory.
2, 3, 4	1.c	Apply the components of scientific processes and methods in the classroom and laboratory investigations.
2, 3, 4	1.d	Communicate results of scientific investigations in oral, written, and graphic form.
2	2.a	Identify the characteristics of living things.
1, 2	3.d	Describe the way in which cells are organized in multicellular organisms.
3, 4	6.f	Analyze the results of natural selection in speciation, diversity, adaptation, behavior and extinction.
Mississippi Competencies for Human Anatomy and Physiology		
Lesson	Competency	Description
1, 2, 3, 4	2.a	Define the terms: anatomy, physiology, and homeostasis; explain the importance of the interaction between structure and function of organs and organ systems in the human body.
1, 2, 4, 5	5.d	Identify the structure and function of the human systems, explore the interactions among the systems and investigate major disorders/diseases associated with each – Nervous system.
Mississippi Competencies for Pre-Algebra		
Lesson	Competency	Description
3, 5	1.b	Solve real-life problems involving addition, subtraction, multiplication, and division of rational numbers (i.e., integers, decimals, fractions, and mixed numbers.)
3, 5	1.d	Add, subtract, multiply, and divide rational numbers (i.e., integers, decimals, fractions, and mixed numbers) with and without calculators.
3, 4	5.a	Construct and interpret histograms, bar graphs, line graphs, frequency tables, circle graphs, stem-and-leaf plots, box-and-whisker plots, and scatter plots from given data.
2, 3, 4, 5	5.b	Predict patterns or generalize trends based on given data.
4	5.c	Explain the role of fair and bias sampling and its effect on data.

2, 3, 4, 5	5.g	Collect data. Select and justify the most appropriate representations to organize, record and communicate data.
Mississippi Competencies for Algebra I		
Lesson	Competency	Description
3, 4, 5	1	Understand relationships between numbers and their properties and perform operations fluently.
2, 3, 4	2.d	Explain and illustrate how a change in one variable may result in a change in another variable and apply to the concepts of independent and dependent variables.
3	4.a	Solve real-world problems involving formulas (e.g., circumference, perimeter, area, volume, interest, distance, rate, work, etc.).
2, 3, 4, 5	5.a	Collect, organize, graph, and interpret data sets.
Mississippi Competencies for Language Arts – Grades 9 & 10		
Lesson	Competency	Description
All lessons	3	The student will produce, analyze, and evaluate effective communication.
All lessons	3.c	The student will compose responses to literature, position papers, and expository essays in the informative mode clearly expressing a main idea thoroughly developed by relevant supporting details, which are well elaborated and sufficient in number.
All lessons	4	The student will use standard English grammar, mechanics, and sentence structure to communicate.
Mississippi Competencies for Comprehensive Health – Grades 9 - 12		
Lesson	Competency	Description
3, 4, 5	3.e	Describe how individuals can help reduce the misuse and abuse of drugs.
3, 4, 5	3.f	Explain how drugs and medicines have affected the life span of human beings.
5	3.g	List future positive effects of drugs and medicines on society.
3, 4, 5	7.b	Demonstrate the ability to work cooperatively when advocating for healthy individuals.
3, 4, 5	7.c	Illustrate how drug use, misuse, and abuse cause problems in society.